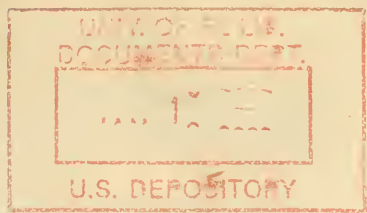


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Adamsville, Ala.



INTERSTATE COMMERCE COMMISSION.

REPORT OF THE CHIEF OF THE BUREAU OF SAFETY COVERING INVESTIGATION OF AN ACCIDENT WHICH OCCURRED ON THE ST. LOUIS-SAN FRANCISCO RAILROAD NEAR ADAMSVILLE, ALA., AUGUST 9, 1919.

NOVEMBER 6, 1919.

To the Commission:

On August 9, 1919, there was a collision between an Illinois Central freight train and a St. Louis-San Francisco work train on the St. Louis-San Francisco Railroad near Adamsville, Ala., which resulted in the death of 3 employees and injuries to 28 employees. After investigation, I respectfully submit the following report:

The Birmingham subdivision of the southern division of the St. Louis-San Francisco Railroad, on which this accident occurred, is a single-track line over which trains are operated by time table, train orders transmitted by telephone, and an automatic block-signal system. Between Birmingham and Jasper, Ala., a distance of 41 miles, trains of the Illinois Central Railroad are operated over the tracks of the St. Louis-San Francisco Railroad, under the jurisdiction of the latter company. It was on this joint track that the accident occurred. Between Adamsville and Coal Creek, a distance of 4.8 miles, the line consists of a series of sharp curves and deep cuts, and there is no place between these stations where an approaching train can be seen for a distance of more than 1,500 feet. Approaching the point of accident from the south, there is a tangent about 670 feet long, followed by an 8° curve to the left approximately 800 feet long, leading through a rock cut nearly 50 feet deep. The collision occurred near the center of this curve. Approaching from the north, there is a 6° curve to the left, about 800 feet in length, followed by the 8° curve to the right on which the collision occurred. The range of vision of engine crews is less than 200 feet. The grade is approximately 1 per cent descending for northbound trains. At the time of the accident the weather was clear.

The trains involved in this accident were St. Louis-San Francisco work extra 1622 and Illinois Central extra 1736. Extra 1622 consisted of locomotive 1622, 5 empty flat cars, and a caboose, in charge of Conductor Bazemore and Engineman McGowan. This train had

been working in the vicinity of mile post 719, between Adamsville and Coal Creek, under authority of train order No. 5, reading as follows:

Engine 1622 work 6 a. m. to 8.30 p. m. between Pratt City and Dora, protecting against second and third class trains. All trains north except first class wait at Adamsville until 9 a. m.

Pratt City and Dora are located south and north, respectively, of the territory involved in this accident. One flagman of extra 1622 was stationed at Coal Creek and another at Adamsville, the latter flagman having verbal instructions to inform all except passenger trains to proceed under control, expecting to find the work extra at any point between Adamsville and Coal Creek. At about 3.20 p. m., while at Coal Creek allowing southbound extra 1619 to pass, Conductor Bazemore called the dispatcher over the telephone and inquired as to the next train north and was told that there would be nothing ahead of train No. 926, a first-class train due out of Adamsville at 4.48 p. m. The crew then decided to go to Adamsville for train No. 926. The work extra accordingly followed extra 1619 out of Coal Creek, the entire train being operated backing up, passed the two block signals between Coal Creek and Adamsville, both of which displayed caution indications, and was proceeding at a rate of speed between 6 and 8 miles an hour when it collided with extra 1736.

Northbound extra 1736 consisted of Illinois Central locomotive 1736 and a caboose, in charge of Conductor Hargett and Engineman Parker. At Pratt City, the Birmingham terminal for Illinois Central freight trains, the crew received a copy of train order No. 5, previously quoted. Extra 1736 left Pratt City at 3.40 p. m. and arrived at Adamsville at 4.15 p. m., taking the siding to meet southbound extra 1619. While on the siding, the engineman was notified verbally by the flagman of the work extra that that train was working near milepost 719, 3 miles north of Adamsville, but to run carefully, expecting to find the train anywhere between Adamsville and Coal Creek. As soon as extra 1619 passed Adamsville, or about 4.25 p. m., extra 1736 headed out upon the main line and on reaching signal 721.4, located just north of the north passing-track switch, found it to be in the stop position. The engineman did not stop, but proceeded at reduced speed of about 6 miles an hour and sounded the whistle several times between the signal and the point of accident. When the engineman of extra 1736 saw the work extra coming around the curve he made an emergency application of the brakes and, according to the statements of the crew, had brought his train to a stop before it was struck by the caboose of the work extra, the collision occurring at 4.30 p. m.

The caboose of the work extra and the flat car next to it were badly damaged, the body of the caboose coming to rest on top of

the wreckage of the flat car. Engine 1736 was not derailed, but had the pilot broken off, the pilot beam broken, and the headlight knocked off. The track was not damaged. The three employees killed and all but two of the injured were riding on the flat car.

Conductor Bazemore, of the work extra, stated that he had one flagman stationed at Adamsville and one at Coal Creek, the former with oral instructions and the latter with written instructions. Flagman McCormick, stationed at Adamsville, was instructed to advise all trains except passenger trains to proceed into that territory under control, expecting to find extra 1622 working at any point between Adamsville and Coal Creek, but not to designate any definite point. The conductor said he told the flagman that he wanted him to impress upon enginemen that they were liable to find his train at any place between Adamsville and Coal Creek. He called the dispatcher by telephone from Coal Creek at about 3.20 p. m., asked for a line-up, and was informed that the first northbound train would be No. 926, due out of Adamsville at 4.48 p. m. He then advised his engineman of this fact, also that southbound extra 1619, the connection of train No. 135, would be out of Coal Creek at about 3.45 p. m., that they were not to delay that train, and that they would follow extra 1619 to Adamsville and there await train No. 926. He stated that the dispatcher informed him that the engine of extra 1619 was in poor condition and therefore not to delay that train on the hill, otherwise he would have placed a flagman on extra 1619 to protect the movement of the work extra to Adamsville. After extra 1619 passed Coal Creek the work extra departed, at about 4.05 p. m., having waited until signal 717.7, near the south passing track switch, went from stop to caution. The first block signal south of Coal Creek was displaying a stop indication and they slowed down, but just before they got to it, it went to caution, as did the next signal, No. 720.1, the last southbound signal passed previous to the collision. With two section foremen Conductor Bazemore was riding on the rear platform of the caboose. He estimated that the train was proceeding at a speed of 7 or 8 miles an hour when he saw the engine of extra 1736 approaching around the curve about 200 feet distant and moving at a speed he estimated at 10 or 12 miles an hour. He attempted to reach the air hose and apply the brakes, but was pushed away from it by one of the section foremen getting off.

Bulletin No. 191, issued by the superintendent of the southern division of the St. Louis-San Francisco Railroad, under date of December 5, 1918, reads in part as follows:

When conductors on work trains drop off flags to one or both directions where they are at work, and who leave with these flagmen written flagging instructions to other trains to look out for them, they must not have these instructions to read to the approaching train to disregard the block; when

the approaching train receives these written flagging instructions he must on arrival at block which is against him, flag through this territory until the work train is found. After closing in upon work train he may flag on work train to next passing track where his clear block is found. * * *

* * * Instructions are intended to avoid the indiscriminate use of flagging instructions by conductors authorizing the ignoring of the blocks which they have no right to do and to avoid the possibility of trains which appear to be under control colliding with work trains which might be moving within work limits.

Bulletin No. 310, issued by the same authority under date of April 21, 1919, reads as follows:

All engineers:

Please be governed by the following instructions:

When a flag is at a red block with written instructions, the instructions will carry the engineer through from this red block to the next red block, but an intervening red block must not be passed. It will be necessary to flag through that territory. Conductors will be governed accordingly and where possible to do so, place their flag with written instructions at a point where there will be no intervening block between where the flag is located and where the work train is to be driven into the passing track or clear.

Conductor Bazemore stated that he had seen Bulletin No. 191 on the bulletin boards at Dora and Birmingham, but had not seen Bulletin No. 310. He also said that, according to his understanding of the rules, a train order was required for the movement of his train under the existing circumstances, but that it had been his custom to act on a verbal line-up received from the dispatcher.

Engineman McGowan, of the work extra, stated that he was acquainted with the instructions given the flagman at Adamsville, was with Conductor Bazemore in the telephone booth at Coal Creek while the conductor was talking with the dispatcher, and was told that there would be nothing ahead of train No. 926. After this conversation they agreed that they would follow extra 1619 south to Adamsville for train No. 926 on the information given them, and he thought that seven or eight minutes elapsed before they followed extra 1619 out of Coal Creek. He stated that he proceeded at a speed of from 6 to 10 miles an hour, observed all of the block signals as he approached them, and that they displayed caution indications. He did not see extra 1736 approaching, and was working steam when the collision occurred, at which time the speed of his train was between 6 and 8 miles an hour. He stated that he had seen Bulletin No. 191 on two bulletin boards, but did not know of Bulletin No. 310 before the accident.

Flagman McCormick, of extra 1622, stated that he saw the orders under which they were working on the day of the accident, and that Conductor Bazemore placed him at Adamsville station after verbally instructing him to inform all northbound trains except first-

class that extra 1622 was working between Adamsville and Coal Creek and was likely to be anywhere between the two stations. When instructed by his conductor, he did not ask that these instructions be in writing, although he knew the rules so prescribed. Extra 1736 was in the passing track at Adamsville when he flagged it and got up on the engine to give the engineman instructions, informing him that extra 1622 was working between Adamsville and Coal Creek, to look for them at Mile Post 719-10, and to have them let him by at Coal Creek, but that they might be encountered anywhere between the two stations; he said nothing to the engineman about the block signals. He stated that he had seen Bulletin No. 191, but had not seen Bulletin No. 310.

Section Foremen Goldsby, Guin, and Mullins, who were riding on the rear platform of the caboose of the work extra, gave various estimates concerning the speed of extra 1736 when it was first seen by them, their estimates ranging from 10 to 20 miles an hour; two of them stated that extra 1736 was in motion when the collision occurred. All agreed that the work extra was not moving over 8 miles an hour at the time of the collision, and all corroborated the conductor's testimony that the block signals were at caution when passed.

Engineman Parker, of extra 1736, stated that while his train was in the passing siding at Adamsville and before extra 1619 passed, the flagman of the work extra, after flagging him, got up on the engine and informed him that the work extra was at milepost 719 and to proceed to where the work train was located and have that train go to Coal Creek to let them by, but to look for the extra anywhere else on the main line, as it might have moved from milepost 719. Extra 1619 left Adamsville at 4.24 p. m., and immediately upon its departure extra 1736 pulled out of the siding upon the main line, at 4.25 p. m. He stated that when he reached the northbound signal just north of the north passing track switch, No. 721.4, it was in the stop position. He did not stop, but passed at a speed of 6 miles an hour and sounded the road-crossing whistle signal twice between there and the point of accident, as well as cautioning the two firemen to keep a careful watch. Just as the engine started around the curve, both firemen called to him that the work extra was coming, and he immediately applied the brakes in emergency and reversed the engine, bringing it to a stop before it was struck by extra 1622. He further stated that he considered that he had a right to pass signal 721.4 at danger on the instructions he had received from the flagman of extra 1622, and produced a copy of bulletin No. 310 as his authority, but later he admitted that he had never seen this bulletin prior to the accident and did not know

that it had been issued, neither had he seen bulletin No. 191 until after the accident, and he did not think these bulletins had been posted on the bulletin boards to which he had access. Having seen neither of these bulletins, the only instructions he had, therefore, were those contained in the book of rules, and he stated that, as it had been customary to pass red blocks, he had inquired and was told that there was authority for the practice. Under the book of rules trains in single-track territory are required to stop five minutes at a red block and then proceed under flag protection. This rule, No. 971, reads as follows:

Trains on single track finding signal in stop position will stop before entering block, and immediately send flagman in advance, wait full 5 minutes, and then follow flag through the block under control.

Conductor Hargett, of extra 1736, stated that he saw the flagman of the work extra at Adamsville, but did not talk to him or know why he was there, neither did he make any inquiry concerning him. The speed of his train after leaving Adamsville was 8 or 10 miles an hour. He heard the engineman sound two road-crossing signals, but did not notice the indications of the automatic signals as he was busy figuring on where to meet an opposing passenger train. His first intimation of the accident was when he noticed the engineman applying the air in emergency; the train had been brought to a stop when the collision occurred. He had not seen either Bulletin No. 310 or No. 191 before the accident, but said a copy of the former bulletin was mailed to him afterwards. He had been on engines which passed red blocks on flagmen's verbal instructions. He had no authority for doing so except custom, and he said that in this case he would not have sent a flag ahead had he known he was passing a stop signal.

Flagman Allen, of extra 1736, stated that he saw the flagman get on the engine at Adamsville, and thought he was flagging the work extra. He did not know what instructions the flagman gave Engineman Parker and did not see the position of the northbound signal at the north switch at Adamsville. The speed leaving Adamsville did not exceed 10 miles an hour and he thought Engineman Parker had reduced speed to about 6 miles an hour just before the collision, which occurred after his own train had been brought to a stop. He further stated that he had on previous occasions been on trains which had passed red blocks on verbal instructions.

Fireman Garner of extra 1736 stated that he overheard the instructions given Engineman Parker by the flagman of extra 1622 to proceed and look out for the work extra on the hill, and to run by that train at Coal Creek. He saw the signal at the north switch at Adamsville displaying a stop indication, and said that his train

passed it at a speed of 6 or 8 miles an hour. The engineman cautioned him to keep a sharp lookout and twice sounded the road crossing whistle signal. He was riding on the seat box when he saw the caboose of the work extra coming around the curve and called to Engineman Parker, who brought the train to a stop before the collision occurred. He thought the work extra was traveling at a speed of 20 miles an hour before the collision.

Fireman's Helper Striclin, of extra 1736, stated that he heard the flagman of the work extra give Engineman Parker instructions at Adamsville to go through the block and look out for the work extra, which would let them pass at Coal Creek. He saw the signal at the north end of Adamsville passing track in the stop position. Engineman Parker cautioned them to keep a sharp lookout and the train proceeded at a speed of 6 or 8 miles an hour. He was on the fireman's side when he saw the caboose of extra 1622 about 250 yards away, and called to the engineman, who immediately stopped the train. He said on some occasions the instructions given to enginemen by flagmen were written, and at other times they were verbal.

Brakeman Crawford, of extra 1736, who was riding in the cupola of the caboose, stated that up to the time of the accident they had been traveling at about 8 miles an hour. He saw the caboose of the work extra as it came around the curve and felt the air brakes apply on the caboose, the train being stopped before the collision occurred. He had heard whistle signals sounded, but as he was not paying close attention he did not know what they were.

Dispatcher Gentry, on duty until 4 p. m., stated that the work extra was at Coal Creek for trains Nos. 1301 and 105, and that at 3.15 p. m., Conductor Bazemore called him on the telephone from that point, and he gave him some time on train No. 105. The only southbound trains he had listed were trains Nos. 921 and 135, the latter with a car of stock, and he instructed Conductor Bazemore not to delay it. While they were talking, the operator at Dora reported over the telephone that train No. 135 was then passing that station. Conductor Bazemore said he would be delayed quite a while if he waited at Coal Creek for train No. 135 and asked permission of the dispatcher to proceed to Adamsville ahead of that train. In reply to the dispatcher's question as to where he was working, Conductor Bazemore told him: "About half way up the hill," and then asked him if there was any train ahead of northbound train No. 926. The dispatcher informed him there was not, and Conductor Bazemore then said he would precede train No. 135 into Adamsville. The dispatcher stated that he assumed that this movement was being made and at the time he gave Conductor Bazemore the line-up of trains, he did not expect extra 1736 to be ahead of No. 926. He stated he

did not give Conductor Bazemore the line-up to be used as an order, but would have given him orders had he requested them. He made no record of the information he had given Conductor Bazemore on his transfer when he went off duty.

This accident was caused by the failure of Engineman Parker and Conductor Hargett, of extra 1736, properly to obey automatic block signal indications.

Operating rule No. 971, as well as Bulletins Nos. 191 and 310, is involved in this case, but these employees stated that previous to the accident they had not seen either of these bulletins, and there is some evidence indicating that they were not properly posted. Not knowing of the existence of these two bulletins, rule No. 971 was the controlling rule and its requirements should have been rigidly observed. Had extra 1736 stopped five minutes at signal 721.4 and sent a flagman ahead, as required by this rule, the accident would have been prevented. Had Conductor Hargett been riding in the cupola of the caboose, or had he required the flagman to ride there, he would have known that Engineman Parker had passed a stop signal. On the other hand, however, he had seen the flagman at Adamsville, but did not know why he was there or make any inquiry concerning him, and his statements indicate that he would not have stopped his train even if he had known it was passing a red signal. Under these circumstances he is equally at fault with Engineman Parker.

Engineman Parker was employed as a fireman in 1903 and promoted to engineman in 1906. Conductor Hargett was employed as a flagman in 1907 and promoted to conductor in 1908. At the time of the accident both of these employees had clear records. Engineman Parker had been on duty about 7 hours and Conductor Hargett about 6 hours, after 12 or more hours off duty.

The crew of the work extra knew about Bulletin No. 191, while the crew of extra 1736 said they had not seen it. Neither of these crews knew of the existence of Bulletin No. 310. These bulletins do not authorize trains to pass red blocks unless flagmen are stationed at such blocks. This was not the case in this instance; consequently the provisions of these bulletins did not apply. But this does not alter the dangerous condition resulting from bulletins being in effect without the knowledge of employees. There can be no excuse for the existence of such a condition on any railroad, and the responsible operating officials of this railroad should take immediate steps to see that all bulletins are properly posted and that all employees are fully acquainted with their contents.

There was evidence to the effect that the crew of the work extra should not have attempted the move to Adamsville without train orders; in fact, the conductor himself, in answer to questions

by the general superintendent of the St. Louis-San Francisco Railroad, stated that he was making a movement not authorized by the book of rules. The basis for this general opinion is not clear. The work extra was in possession of an order fixing its working limits and directing it to protect against second and third class trains. In the Forms of Train Orders, Example H-3, and the explanation thereof, as contained in the book of rules, the words "not protecting against extras" are included in the work order when such protection is not to be afforded. These words were not included in train order No. 5, and under the order as issued, therefore, the work extra was required to protect against extras. In accordance with this requirement, flagmen were stationed at Coal Creek and at Adamsville, between which points the train was working. The flagman at Adamsville had oral instructions to notify all except passenger trains that the work extra was between those two points and to look out for the work extra at any point. The flagman at Coal Creek had written instructions to hold all freight trains, and to have them call the work train in by means of whistle signals. Having sent out these flagmen with these instructions, and thereby provided protection against second and third class trains and extras, the work extra had a right to move back and forth at will between Coal Creek and Adamsville, provided it cleared the time of first-class trains, and no order of any kind was required to permit it to move from Coal Creek to Adamsville whenever it so desired. The conductor of the work extra should have given written instructions to both of his flagmen. Failure to do this, which is required by the bulletins referred to, has often resulted in accidents due to misunderstanding of flagging instructions, and Conductor Bazemore is to be censured accordingly. His failure fully to obey this requirement, however, did not have any bearing on this accident, as the statements of the engineman of extra 1736, as well as of the flagman of the work extra, indicate that the flagging instructions were properly and correctly communicated.

While under the circumstances as they existed in this case the crew of extra 1736 is responsible for this accident, attention is called to the fact that had the flagman at Adamsville been stationed at signal 721.4 instead of at Adamsville station, the crew of extra 1736 would have had the right, under Bulletin No. 310, to pass this red block and proceed until either the work extra or another red block was encountered. Had this been the case, the accident undoubtedly would have occurred, without any violation of rules on the part of either of the two crews involved, and the responsibility therefor would have rested upon the officials who authorized the issuance of Bulletin No. 310, for such an arrangement would have resulted in both

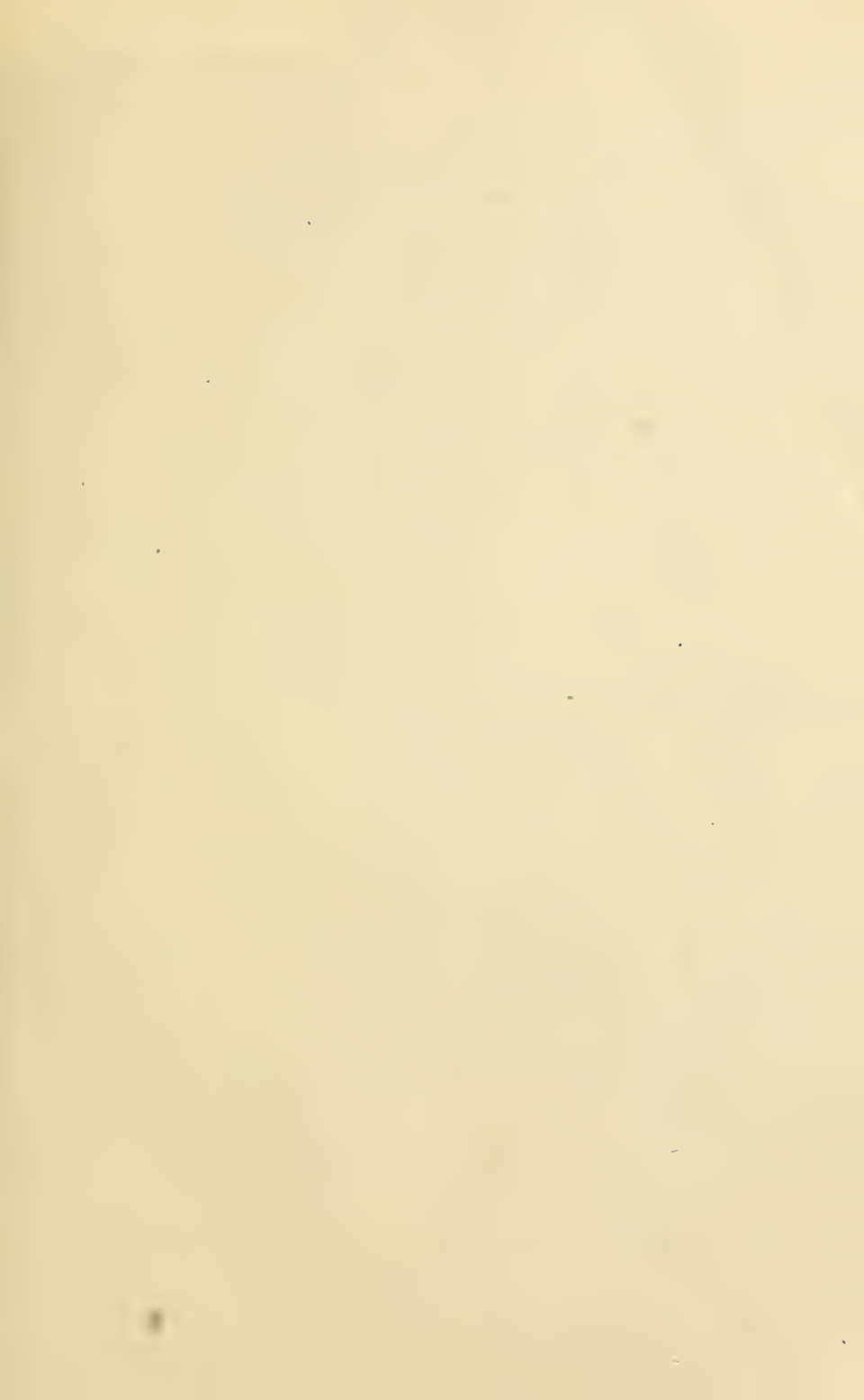
trains having right to the track between signal 721.4 and the succeeding northbound automatic signal. Bulletins or rules authorizing trains to pass red blocks on single-track line, under any circumstances without full flag protection, are a serious detriment to safety in train operation. Immediate steps should be taken by the operating officials of the St. Louis-San Francisco Railroad to correct the dangerous situation created by the terms of Bulletin No. 310.

Respectfully submitted.

W. P. BORLAND,
Chief, Bureau of Safety.

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